# S E C T I O N

# Other services

Dialysis Hospice Durable medical equipment

Chart 12-1. Total number of dialysis facilities is growing; for profit and freestanding are increasing over time

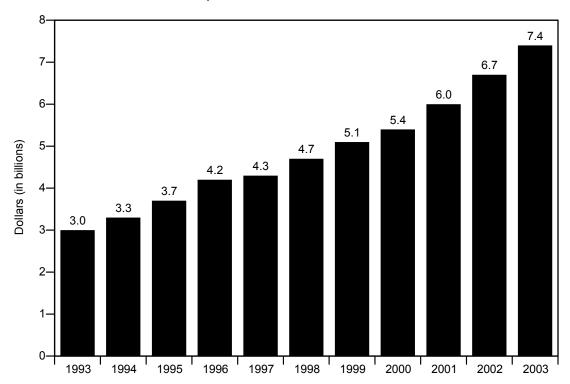
|                            | 1993  | 1998  | 2003  |
|----------------------------|-------|-------|-------|
| Total number of            | 2 242 | 2 204 | 4 494 |
| dialysis facilities        | 2,343 | 3,394 | 4,421 |
| Mean number of             |       |       |       |
| hemodialysis stations      | 15    | 16    | 17    |
| Percent of all facilities: |       |       |       |
| Urban                      | 77%   | 75%   | 75%   |
| Rural                      | 23    | 25    | 25    |
| For profit                 | 61    | 75    | 77    |
| Nonprofit Nonprofit        | 39    | 25    | 23    |
| Freestanding               | 70    | 79    | 84    |
| Hospital based             | 30    | 21    | 16    |
| Four largest chains        | N/A   | N/A   | 58    |
| Any chain                  | N/A   | N/A   | 74    |
| Nonchain                   | N/A   | N/A   | 26    |

Note: N/A (not applicable).

Source: Compiled by MedPAC from the CMS facility survey file.

- Between 1993 and 2003, the number of freestanding and for-profit facilities increased, while hospital-based and nonprofit facilities decreased. Freestanding facilities increased from 70 to 84 percent of all facilities, and for-profit facilities increased from 61 to 77 percent of all facilities.
- During this time, the proportion of facilities located in rural areas has remained relatively constant.
- Specific information about each dialysis facility can be found on the CMS website, available at http://www.medicare.gov/Dialysis/Home.asp.

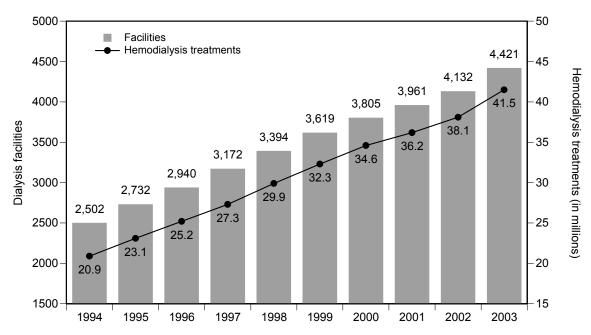
Chart 12-2. Medicare spending for outpatient dialysis services furnished by freestanding dialysis facilities, 1993–2003



Source: CMS, Office of the Actuary, 2004.

- Between 1993 and 2003, Medicare spending for both dialysis treatments (for which
  providers are paid a predetermined rate) and for injectable drugs administered during
  treatments (for which providers are paid on a per-unit basis) increased by about 9 percent
  per year.
- Two factors contributing to spending growth are the increasing size of the dialysis population and the growing use of injectable drugs, such as erythropoietin, iron supplements, and vitamin D analogues.
- The number of dialysis patients increased by 6 percent annually between 1993 and 2002.
   This growth is linked to a number of factors, including improvements in survival, as well as increases in the number of people with diabetes, a risk factor for end-stage renal disease.
- Between 1996 and 2002, estimated spending for injectable drugs increased by 17 percent annually; in contrast, spending for dialysis increased by 6 percent annually during this time period. The year 1996 is the earliest year for which this data is available.

Chart 12-3. Dialysis facilities' capacity has increased steadily between 1994 and 2003



Source: Compiled by MedPAC from the 1993–2003 facility file from CMS.

- Providers have met the demand for furnishing care to an increasing number of dialysis patients by opening new facilities. In 2003, a facility provided over 9,400 treatments per year on average.
- Between 1994 and 2003, the total number of dialysis facilities grew by about 6.5 percent annually, and the number of hemodialysis treatments grew by 7.9 percent annually.
- Specific information about each dialysis facility can be found on the CMS website, available at http://www.medicare.gov/Dialysis/Home.asp.

Chart 12-4. A disproportionate number of dialysis facilities that closed were small, nonprofit, and hospital based

|   | Between 2003 and 2004     |                   |  |  |
|---|---------------------------|-------------------|--|--|
| Characteristics of facilities                     | Facilities remaining open | Closed facilities |  |  |
| Mean number of hemodialysis stations              | 17.3                      | 12.2              |  |  |
| Percent of all facilities: Nonprofit              | 24%                       | 46%               |  |  |
| Hospital-based                                    | 15                        | 44                |  |  |
| Rural   | 24                        | 26                |  |  |
| In HPSAs  | 10                        | 7                 |  |  |
| Percent of households receiving public assistance | 4                         | 4                 |  |  |
| Percent of population that was African American   | 18                        | 24                |  |  |

Note: HPSA (health professional shortage area).

Source: Compiled by MedPAC from the 2003–2004 Facility Survey file from CMS and from the Bureau of the Census.

 Facilities that closed in 2004 were no more likely to be in rural, health professional shortage, or low-income areas than were facilities that remained in business between 2003 and 2004.
 This suggests that beneficiaries should not be having systematic problems obtaining care in these areas.

But closures may be disproportionately occurring in areas where a higher proportion of the
population is African American: 24 percent of the population was African American in areas
served by facilities that closed compared with 18 percent of the population in areas served
by facilities that remained open. However, the variables measuring race, income, and
ethnicity are derived from area-level data. Area-level data cannot provide direct information
about the causality of a relationship.

Chart 12-5. The ESRD population is growing, and most ESRD patients undergo dialysis

|   | 1993                  |                | 1997                  |               | 2002                  |                |
|---|-----------------------|----------------|-----------------------|---------------|-----------------------|----------------|
|   | Patients (thousands)  | Percent        | Patients (thousands)  | Percent       | Patients (thousands)  | Percent        |
| Total   | 248.2                 | 100%           | 334.3                 | 100%          | 431.3                 | 100%           |
| Dialysis<br>In-center hemodialysis<br>Home hemodialysis | 180.9<br>149.1<br>0.8 | 73<br>60<br><1 | 244.2<br>210.0<br>1.7 | 73<br>63<br>1 | 308.9<br>280.4<br>1.2 | 72<br>65<br><1 |
| Peritoneal dialysis<br>Unknown                          | 27.3<br>3.7           | 11<br>2        | 28.6<br>3.9           | 9<br>1        | 24.9<br>2.4           | 6<br>1         |
| Functioning graft and kidney transplants                | 67.4                  | 27             | 90.1                  | 27            | 122.4                 | 28             |

Note: ESRD (end-stage renal disease). Totals may not equal sum of components due to rounding.

Source: Compiled by MedPAC from the United States Renal Data System.

- Persons with end-stage renal disease (ESRD) require either dialysis or a kidney transplant to maintain life. The total number of patients increased by 6.3 percent annually between 1993 and 2002.
- In hemodialysis, a patient's blood flows through a machine with a special filter that removes
  wastes and extra fluids. In peritoneal dialysis, the patient's blood is cleaned by using the
  lining of his or her abdomen as a filter. Peritoneal dialysis is usually performed in a
  patient's home.
- Most ESRD patients undergo hemodialysis administered in dialysis facilities three times a
  week. Hemodialysis use is growing and use of the two types of dialysis administered in
  patients' homes—peritoneal dialysis and home hemodialysis—is declining.
- Functioning graft patients are patients who have had a successful kidney transplant.
   Patients undergoing kidney transplant may receive either a living or a cadaveric kidney donation. Of the 15,712 kidney transplants performed in 2002, 40 percent of the kidneys were from living donors and 60 percent were from cadaver donors.
- This table includes both patients who are and are not Medicare eligible. In 2002, about 93
  percent of dialysis patients were Medicare eligible; Medicare was the primary payer for
  about half of all kidney transplants.
- Information on the incidence and prevalence of patients with renal disease can be found on the US Renal Data System website, available at <a href="http://www.usrds.org">http://www.usrds.org</a>.

Diabetics and the elderly are the fastest growing Chart 12-6. segments of the ESRD population

|                          | Percent<br>of total<br>in 2002 | Annual<br>percent change<br>1996–2002 |
|--------------------------|--------------------------------|---------------------------------------|
| Total (n = 431,284)      | 100%                           | 6%                                    |
| Age                      |                                |                                       |
| 0–19                     | 2                              | 3                                     |
| 20–44                    | 21                             | 3<br>2                                |
| 45–64                    | 42                             | 7                                     |
| 65–74                    | 20                             | 5                                     |
| 75+                      | 15                             | 8                                     |
| Sex                      |                                |                                       |
| Male                     | 55                             | 6                                     |
| Female                   | 45                             | 6<br>5                                |
| Race/Ethnicity           |                                |                                       |
| White                    | 62                             | 5                                     |
| African American         | 31                             | 5                                     |
| Native American          | 1                              | 5                                     |
| Other                    | 6                              | 10                                    |
| Underlying cause of ESRD |                                |                                       |
| Diabetes                 | 36                             | 8                                     |
| Hypertension             | 24                             | 5                                     |
| Glomerulonephritis       | 16                             | 4                                     |
| Other causes             | 25                             | 4                                     |

Note: ESRD (end-stage renal disease). Totals may not equal sum of the components due to rounding.

Source: Compiled by MedPAC from the United States Renal Data System.

- Among hemodialysis patients, about 45 percent are over age 65. About 60 percent are white.
- Diabetes is the most common cause of renal failure.
- The number of hemodialysis patients increased by 6 percent annually between 1996 and 2002. Among the fastest growing groups of hemodialysis patients are those who are over age 75 and those with diabetes as the cause of kidney failure.
- Information on the incidence and prevalence of patients with renal disease and their demographic and clinical characteristics can be found on the U.S. Renal Data System website, available at http://www.usrds.org.

Chart 12-7. Aggregate margins vary by type of freestanding dialysis facility, 2003

| Type of facility    | Aggregate margin |
|---------------------|------------------|
| All facilities      | 4.2%             |
| Urban               | 4.6              |
| Rural               | 3.1              |
| For profit          | 4.4              |
| Nonprofit           | 0.8              |
| Four largest chains | 5.4              |
| Other chains        | 0.4              |
| Nonchain            | -0.7             |
| Furnishes per year: |                  |
| ≤ 10,000 treatments | -0.9             |
| > 10,000 treatments | 6.2              |

Note: Margins include payments and costs for composite rate services and injectable drugs. Margins are adjusted to reflect MedPAC's analysis of audited cost reports, which found that the ratio of allowable to reported cost per treatment for composite rate services is 95.5 percent.

Source: Compiled by MedPAC from the 2001 and 2003 cost reports and the 2003 institutional outpatient file from CMS.

- For 2003, the adjusted aggregate Medicare margin for composite rate services and injectable drugs was 4.2 percent.
- Aggregate margins vary based on a facility's size, affiliation with the four largest chains, and
  profit status. This finding stems from differences in the cost per treatment; for example, total cost
  per treatment was 7 percent lower for facilities affiliated with the four largest chains than for
  facilities not affiliated with these chains. In addition, this finding also reflects differences in the
  proportion of payments facilities receive from composite rate services, which are less profitable
  than dialysis injectables.
- Aggregate margins for composite rate services and injectable drugs declined from 7.6 percent
  in 1999 to 4.2 percent in 2003. During this period the composite rate increased twice, by 1.2
  percent in 2000 and 2.4 percent in 2001. Providers' cost per treatment for composite rate
  services spiked between 2000 and 2002, which is discussed earlier in this section. Although
  providers' cost per treatment for dialysis injectables increased during this period, the difference
  between payments and costs remained about the same.
- Between 1999 and 2003, the aggregate Medicare margin for composite rate services and injectable drugs remained positive for the majority of facilities. Among facilities that reported cost information in both 1997 and 2003, 67 percent had positive margins in both years. Only 8 percent of facilities had negative margins in both years.
- More information about the financial performance of dialysis facilities can be found in Chapter 2E of the MedPAC March 2005 Report to the Congress, available at <a href="http://www.medpac.gov/publications/congressional-reports/Mar05">http://www.medpac.gov/publications/congressional-reports/Mar05</a> Ch02e.pdf.

Chart 12-8. The number of freestanding and for-profit hospices has increased the most

|                | Numb  | er of hospice | Percent change |            |
|----------------|-------|---------------|----------------|------------|
|                | 2001  | 2002          | 2003           | 2001–2003  |
| All hospices   | 2,266 | 2,323         | 2,454          | 8          |
| Hospice type   |       |               |                |            |
| Freestanding   | 949   | 1,067         | 1,222          | 29%        |
| HHA based      | 744   | 677           | 653            | -12        |
| Hospital based | 553   | 560           | 562            | 2          |
| SNF based      | 20    | 19            | 19             | -20        |
| Ownership      |       |               |                |            |
| Not for profit | 1,340 | 1,339         | 1,384          | 3          |
| For profit     | 706   | 762           | 883            | 25         |
| Government     | 187   | 188           | 189            | 1          |
| Other          | 35    | 34            | 34             | <b>–</b> 3 |

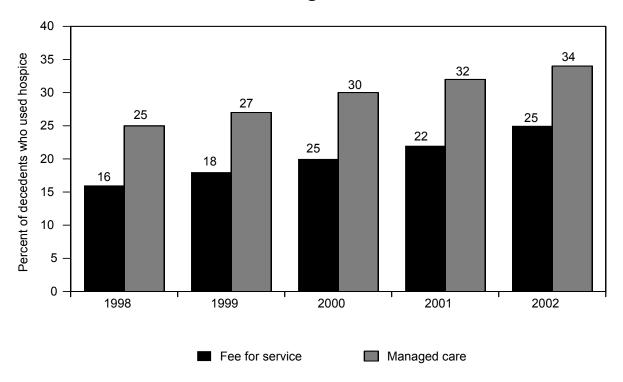
Note: HHA (home health agency), SNF (skilled nursing facility).

Source: MedPAC analysis of unpublished data from CMS.

- The Medicare hospice benefit is specifically targeted to Medicare beneficiaries with a
  terminal illness. It covers a broad set of palliative services for beneficiaries whose physicians
  have determined that, if their illness runs a normal course, they have a life expectancy of
  six months or less. To elect the hospice benefit, beneficiaries must agree to forgo curative
  treatment for their terminal condition. The vast majority of hospice care is provided in
  patients' residences (i.e., their home or their nursing home).
- Hospice volume—measured by the hospice census—has also increased. Over the last several years, the number of high-volume hospices has grown, but the number of low-volume hospices has fallen.
- Between 2001 and 2003, the number of for-profit hospices increased considerably more than hospices with other types of ownership. Specifically, the number of for-profit hospices grew by 25 percent, while the number of not-for-profit and government hospices grew only 3 and 1 percent, respectively.
- Similarly the growth in freestanding hospices (not owned by another type of provider) from 2001–2003 has been much higher (29 percent) than other types (owned by home health agencies, hospitals and skilled nursing facilities).
- Additional information and analysis related to the Medicare hospice benefit can be found in Chapter 6 of MedPAC's June 2004 Report to the Congress, available at http://www.medpac.gov/publications/congressional\_reports/June04\_ch6.pdf.

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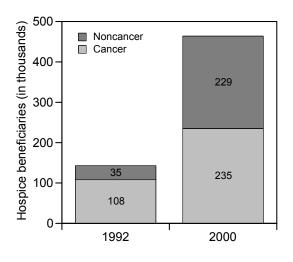
Chart 12-9. Hospice use has grown and remains higher for decedents in managed care

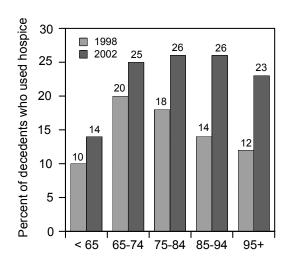


Source: MedPAC analysis of 5 percent enrollee database from CMS, 2003.

- From 1998 to 2002, the total percentage of beneficiaries using hospice in the year before they died grew from 20 percent to 26 percent. Beneficiaries in managed care are more likely to use hospice care than beneficiaries in the fee-for-service program. Between 1998 and 2002, the percentage of beneficiaries who used hospice before they died grew from 25 percent to 34 percent in managed care, and from 16 percent to 25 percent in fee-for-service.
- Additional information and analysis related to the Medicare hospice benefit can be found in Chapter 6 of MedPAC's June 2004 Report to the Congress, available at http://www.medpac.gov/publications/congressional\_reports/June04\_ch6.pdf.

Chart 12-10. Growth in hospice use is greatest among beneficiaries with noncancer diagnoses and those who are older





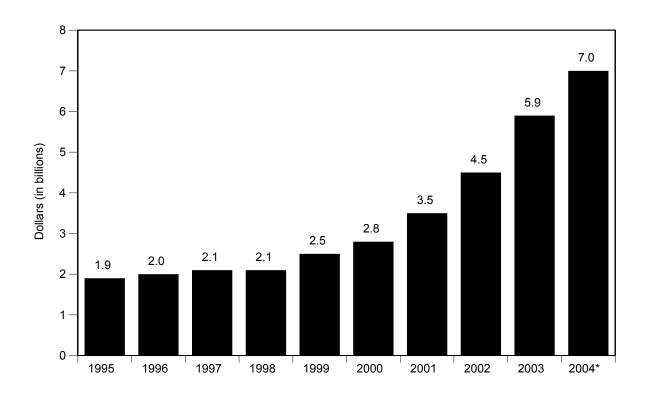
Source: Direct Research, LLC.

Note: Excludes beneficiaries in managed care.

Source: MedPAC analysis of 5 percent enrollee database from CMS, 2003.

- Growth in the use of hospice has occurred among beneficiaries in all age, race, and sex groups.
- Growth in hospice use has been fastest among older Medicare decedents. Between 1998 and 2002, the share of beneficiaries age 95 or older who died while in hospice care rose from 12 percent to 23 percent.
- The growing use of hospice by the oldest Medicare decedents is consistent with findings that hospice use has increased considerably among decedents in nursing facilities. From 1992 to 2000, use of hospice by decedents in nursing facilities grew from 11 percent to 36 percent.
- The share of hospice patients with noncancer diagnoses has grown to be about half the hospice population. The three most common noncancer diagnoses for hospice patients are congestive heart failure, dementia, and lung disease.
- Additional information and analysis related to the Medicare hospice benefit can be found in Chapter 6 of the MedPAC June 2004 Report to the Congress, available at http://www.medpac.gov/publications/congressional\_reports/June04\_ch6.pdf.

Chart 12-11. Recently, Medicare spending for hospice services has increased sharply



Note: \*Estimated spending for 2004.

Source: CMS Office of the Actuary.

- Consistent with increases in the number of hospice users, Medicare spending for hospice care has increased. Spending has grown from an estimated \$3.5 billion in 2001 to an estimated \$7.0 billion in 2003—a 26 percent average annual increase.
- Medicare makes daily (per diem) payments to hospice agencies for each day a beneficiary
  is enrolled in the hospice benefit. Payments are made through a fee schedule with four
  different levels of care: routine home care, continuous home care, inpatient respite care, or
  general inpatient care. The majority of care—95 percent—is provided at the routine home
  care level.

Chart 12-12. Median stays remain stable while long stays grow rapidly

|      |      | Length of stay (in days)       |        |                                |  |
|------|------|--------------------------------|--------|--------------------------------|--|
|      | Mean | 25 <sup>th</sup><br>percentile | Median | 90 <sup>th</sup><br>percentile |  |
| 1998 | 52   | 6                              | 18     | 123                            |  |
| 1999 | 51   | 6                              | 17     | 129                            |  |
| 2000 | 51   | 6                              | 16     | 130                            |  |
| 2001 | 50   | 6                              | 16     | 133                            |  |
| 2002 | 55   | 5                              | 16     | 147                            |  |

Source: MedPAC analysis of 5 percent enrollee database from CMS, 2003.

- In most cases, a beneficiary's length of enrollment in hospice is determined by the number of days a beneficiary lives after electing the hospice benefit.
- Between 2001 and 2002, the average length of enrollment for a beneficiary in hospice care increased from 50 days to 55 days, but the median remained 16 days.
- A consistent subset of the hospice population has short lengths of stay. From 1998 to 2002, more than 25 percent of hospice beneficiaries were enrolled in hospice for less than a week.
- Long stays are getting longer. The length of stay at the 90<sup>th</sup> percentile has steadily increased. The increased prevalence of nursing home residents in the hospice population may be a factor in this long-stay trend.
- Additional information and analysis related to the Medicare hospice benefit can be found in Chapter 6 of the MedPAC June 2004 Report to the Congress, available at http://www.medpac.gov/publications/congressional\_reports/June04\_ch6.pdf.

Chart 12-13. Program payments continue to grow for durable medical equipment

|                                | 2001 payment (millions) | 2002 payment (millions) | 2003 payment (millions) | Percent change<br>2001-2003 |
|--------------------------------|-------------------------|-------------------------|-------------------------|-----------------------------|
| Medical/surgical supplies      | 728                     | 848                     | 947                     | 31%                         |
| Hospital beds                  | 364                     | 380                     | 414                     | 14                          |
| Oxygen, oxygen supplies        | 1,543                   | 1,734                   | 1,913                   | 24                          |
| Wheelchairs                    | 792                     | 1,121                   | 1,456                   | 84                          |
| Orthotic devices               | 739                     | 877                     | 1,087                   | 47                          |
| Drugs administered through DME | 694                     | 855                     | 1,067                   | 54                          |
| Other DME                      | 557                     | 667                     | 817                     | 47                          |
| Total                          | \$5,417                 | \$6,482                 | \$7,701                 | 42                          |

Note: DME (durable medical equipment). Beneficiaries are responsible for a 20 percent copayment for durable medical equipment. DME items are grouped by BETOS (Berenson-Eggers Type Of Service) codes into similar—but not necessarily homogenous—categories.

Source: CMS physician/supplier data by BETOS. www.cms.hhs.gov/data/betos/cy2003.asp.

- DME spending grew 20 percent from 2001 to 2002 and 19 percent from 2002 to 2003.
- The fastest growing category from 2001 to 2003 was wheelchairs. This category has been growing rapidly for several years. CMS, the HHS Office of the Inspector General and others have investigated wheelchair suppliers in initiatives such as Operation Wheeler Dealer. CMS has also refined the current coverage of mobility assistive equipment. Information on the most recent national coverage decision is available at <a href="http://www.cms.hhs.gov/mcd">http://www.cms.hhs.gov/mcd</a>.
- Additional historic Medicare Part B physician and supplier data can be found on the CMS website, available at <a href="http://cms.hhs.gov/data/betos">http://cms.hhs.gov/data/betos</a>.
- CMS will implement a system of competitive bidding to determine DME prices in 2007.

# Web links. Other services

## **Dialysis**

- The US Renal Data System provides information about the incidence and prevalence of patients with renal disease, their demographic and clinical characteristics, and their spending patterns. http://www.usrds.org
- The National Institute of Diabetes & Digestive & Kidney Diseases and the National Kidney Foundation provide health information about kidney disease for consumers.

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http://www.niddk.nih.gov/
http://www.kidney.org/
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- CMS provides specific information about each dialysis facility. http://www.medicare.gov/Dialysis/Home.asp
- MedPAC's June 2005 Report to the Congress recommends changes to how Medicare pays for composite rate services and injectable drugs.
   http://www.medpac.gov/publications/congressional\_reports/June05\_Ch4.pdf
- Chapter 2E of the MedPAC March 2005 Report to the Congress provides information about the financial performance of dialysis facilities.
   http://www.medpac.gov/publications/congressional\_reports/Mar05\_Ch02e.pdf
- MedPAC's October 2003 report describes how Medicare could modernize the outpatient dialysis payment system.
   http://www.medpac.gov/publications/congressional\_reports/oct2003\_Dialysis.pdf
- MedPAC's comment on revisions to payment policies under the physician fee schedule for calendar year 2004, includes changes in how to pay for services furnished by nephrologists.
   http://www.medpac.gov/publications/other\_reports/100603\_RevPhysFeeSched\_CB\_comment.pdf

### **Hospice**

- Chapter 6 of the MedPAC June 2004 Report to the Congress: New approaches in Medicare reviews trends and policy issues for the Medicare hospice benefit.
   http://www.medpac.gov/publications/congressional\_reports/June04\_ch6.pdf
- The MedPAC May 2002 Report to the Congress: Medicare beneficiaries' access to hospice provides information on beneficiaries' access to hospice care.
   http://www.medpac.gov/publications/congressional reports/may2002 HospiceAccess.pdf
- Chapter 7 of the MedPAC June 1999 Report to the Congress examines end-of-life care and makes policy recommendations.
  - http://www.medpac.gov/publications/congressional\_reports/Jun99%20Ch7.pdf

### **Durable medical equipment**

- Pages 30 and 31 of the March 2002 Report to the Congress provide information about the durable medical equipment benefit.
  - http://www.medpac.gov/publications/congressional\_reports/Mar02\_Ch1.pdf